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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,915

12/07/2005

Jacobus Josephus Maria Ruigrok

NL030681US1

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06/09/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

PO BOX 3001

BRIARCLIFF MANOR, NY 10510-8001

EXAMINER

BASHORE, ALAIN L

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/559,915	<b>Applicant(s)</b> RUIGROK ET AL.	
	<b>Examiner</b> Alain L. Bashore	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims 9 and 13 is withdrawn in view of WO 00/79298 Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, 10 and 13 are rejected under 35 U.S.C. 103(a) as obvious over Fox et al in view of WO 00/79298 (WO '298).

Fox et al anticipates a method of manufacturing a device (as a magnetoresistive device, further as a sensing device) with a magnetic layer-structure. There is formed the magnetic layer-structure, then heating the structure with an electrical current having a duration (shorter than 100 ms) such that the electrical current is a pulse having a duration such that no substantial heat transfer from the layer-structure outside the pinning areas takes place, so that the temperature of the pinning layers before and after the current pulse is substantially the same. The pulse is used to select a physical

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process in the laser-structure, the duration and amplitude of the pulse being adapted to the activation energy of the physical process. Increases in the amplitude of the pulse and decreases of the pulse duration are disclosed. (col 3, lines 66 - 67; col 4, lines 1-13; col 11, lines 7-50).

Regarding the recitation of "the environment", such is inherent to Fox et al. As an alternative interpretation, such would have been obvious to one with ordinary skill in the art because Fox teaches not heating any associated structure outside the pinning layers.

Regarding recitations of claims 9 and 13 that were indicated as allowable, since WO '298 teaches current change as changing physical processes (page 3, lines 19-23), such would have been obvious to one with ordinary skill in the art to include to Fox et al to obtain the effective result desired.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al as applied to claims above, and further in view of Voegeli et al.

Fox et al does not disclose a sequence of current pulses.

Voegeli et al discloses a sequence of pluses (col 3, lines 51-60; col 7, lines 2-11, 35-58; col 9, lines 34-48).

It would have been obvious to one with ordinary skill in the art to include a sequence of pluses because Voegeli et al teaches that multiple pluses may be required to achieve the desired effect.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al as applied to claims above, and further in view of WO 00/79298 (Kuiper et al.).

Fox et al does not disclose several magnetoresistive devices further in at least four magnetoresistive devices arranged in a Wheatstone bridge configuration.

Kuiper et al discloses multiple devices including a Wheatstone bridge configuration (p 6, lines 33 to p 7, line 33; p 12, lines 12-17).

It would have been obvious to one with ordinary skill in the art to include several magnetoresistive devices further in at least four magnetoresistive devices arranged in a Wheatstone bridge configuration for the purpose of desired configuration requiring functionality.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:00 am to 4:30 pm (Mon. thru Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alain L. Bashore/  
Primary Examiner, Art Unit 1792